Complications associated with ultrasound-guided breast core needle biopsy (CNB)

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OBJECTIVE

To determine types and frequencies of potential complications associated with ultrasound-guided breast core needle biopsy (CNB).

BACKGROUND

Ultrasound-guided breast CNB has been proved to be a safe and reliable technique for sampling Bi-RADS 4, 5, and occasionally Bi-RADS 6 breast lesions that can be clearly seen on ultrasound. This technique is less invasive than surgery, can be performed quickly, does not deform the breast appearance, and causes minimal scarring and complications. However, some minor complications have been reported for breast CNB in the literature. Herein, we investigated probable complications associated with breast CNB in women referred to our tertiary care center.

MATERIALS AND METHODS

100 consecutive patients referred for breast CNB were enrolled in the study. All breast lesions were clearly depicted on ultrasonography, and all of them were of Bi-RADS 4 or higher. The CNBs were performed under sterile condition with a 14-gauge tru-cut needle. Afterward, the patients were followed by telephone interview after 48 hours and two weeks, and their probable complications and final histopathologic report were recorded. The data were analyzed using SPSS-v.20 software.

RESULTS

16% of the patients experienced complications. 50% of complications were limited to the first 48 hours, and the rest were experienced during the first 48 hours and two weeks after the breast CNB. The complications included severe pain despite analgesic consumption (13%), fever (9%), redness (8%), bruising (6%), stiffness (2%), paresthesia (2%), infection (1%), and hematoma (1%). There was no significant difference in the complication incidence between malignant and benign lesions based on the histopathologic results.

CONCLUSION

Breast CNB seems to be a suitable diagnostic tool with low complication incidence, and the possible complications are predominantly minor in nature.

RECOMMENDED CITATION:

Zare Mehrjardi M, Keshavarz E, Ebrahimi A, Izadpanah E. Determination of complications associated with ultrasound-guided breast core needle biopsy (CNB). 32nd Iranian Congress of Radiology (ICR), Tehran, May 3–6, 2016. Abstract book:75.